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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/091,859

Filing Date: March 06, 2002

Appellant(s): ADLER, RICHARD M.

Kevin M. Drucker
(Reg. No. 47,537)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed February 22, 2007, appealing from the Office action mailed July 14, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the original appeal brief filed on February 22, 2007, was incorrect. That original appeal brief failed to acknowledge an amendment after final rejection filed on September 11, 2006, that was entered. This omission was noted by Examiner in the original examiner's answer dated May 30, 2007. The appeal was returned to Examiner by the Board of Patent Appeals and Interferences on February 5, 2009, to correct this defect, in addition to a defective claim listing in the original appeal brief. A notification of non-compliant appeal brief was issued on March 5, 2009, concerning these defects. Appellant filed a supplemental appeal brief on March 24, 2009. Examiner hereby acknowledges receipt and consideration of the supplemental appeal brief filed on March 24, 2009. The supplemental appeal brief filed on March 24, 2009, corrects the above-noted defects in the original appeal brief. Therefore, appellant's statement of status of amendments is now correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

GROUNDS OF REJECTION NOT ON REVIEW

The following grounds of rejection have not been withdrawn by the examiner, but they are not under review on appeal because they have not been presented for review in the appellant's brief:

- A. The rejection of claim 118 under 35 U.S.C. 112, second paragraph.
- B. The rejection of claim 69 under 35 U.S.C. 103 over Eder, U.S. Patent No. 6,321,205 B1, in view of Honarvar et al., U.S. Patent No. 6,405,173 B1.
- C. The rejections of claims 83-85 and 87 under 35 U.S.C. 103 over Eder.
- D. The rejections of claims 91 and 95-96 under 35 U.S.C. 103 over Eder in view of Bonabeau, U.S. Patent Application Publication No. US 2001/0053991 A1.
- E. The rejection of claim 98 under 35 U.S.C. 103 over Eder in view of Clarisse, U.S. Patent No. 5,247,651, in further view of Watanabe et al., U.S. Patent No. 5,761,486.

(7) Claims Appendix

The appellant's claims appendix contained in the original appeal brief filed on February 22, 2007, was incorrect. That original appeal brief's claims appendix included text with deletion markings. This defect was noted by Examiner in the original examiner's answer dated May 30, 2007. The appeal was returned to Examiner by the Board of Patent Appeals and Interferences on February 5, 2009, to correct this defect, in addition to a defect in the statement of status of

amendments in the original appeal brief. A notification of non-compliant appeal brief was issued on March 5, 2009, concerning these defects. Appellant filed a supplemental appeal brief on March 24, 2009. Examiner hereby acknowledges receipt and consideration of the supplemental appeal brief filed on March 24, 2009. The supplemental appeal brief filed on March 24, 2009, corrects the above-noted defects in the original appeal brief. Therefore, appellant's claims appendix is now correct.

(8) Evidence Relied Upon

| | | |
|--------------------|--------------------|---------|
| 6,321,205 B1 | EDER | 11-2001 |
| 6,405,173 B1 | HONARVAR ET AL. | 6-2002 |
| 6,327,574 B1 | KRAMER ET AL. | 12-2001 |
| 5,953,707 | HUANG ET AL. | 9-1999 |
| US 2002/0065701 A1 | KIM ET AL. | 5-2002 |
| 5,850,538 | STEINMAN | 12-1998 |
| US 2001/0053991 A1 | BONABEAU | 12-2001 |
| US 2002/0099598 A1 | EICHER, JR. ET AL. | 7-2002 |
| 6,212,502 B1 | BALL ET AL. | 4-2001 |
| 5,761,486 | WATANABE ET AL. | 6-1998 |
| 5,247,651 | CLARISSE | 9-1993 |
| 6,990,437 B1 | ABU EL ATA | 6-2006 |

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9-1. Claim 118 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per **Claim 118**, claim 118 recites the limitation "the selected optimal strategy" in the fourth and fifth lines of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9-2. Claims 64-68, 73-81, 89-90, 99-110, 112-116, and 119-121 are rejected under 35 U.S.C. 102(e) as being anticipated by Eder, U.S. Patent No. 6,321,205 B1.

As per **Claims 64 and 104-105**, Eder discloses:

- a computer-implemented method (or a computer system) for supporting decision-making (column 10, lines 25-40; column 46, line 46, through column 47, line 8);

- (means for) constructing a model of a decision domain for creating a plurality of scenarios in the decision domain, the model constructed based on a received selection of a predefined model from among a plurality of predefined models of decision domains (column 5, line 31, through column 6, line 25; shows the valuations used to create the reference's model; there are known methods of performing valuations that the reference's valuation methods must have been chosen from);

- (means for) receiving user-specified baseline scenario parameters defining a baseline scenario (column 6, lines 44-64; reference's invention can calculate current valuation; the baseline scenario is the business's current state; the baseline scenario parameters are the data that define the current state of the business);

- scenario parameters defining one or more alternative scenarios (column 5, line 31, through column 6, line 25; column 6, lines 44-64; reference's invention can simulate future financial performance; reference's invention uses a mathematical model for business calculations; scenario parameters are the input data that define a particular possible future for which financial performance is being predicted);

- decision parameters defining one or more candidate decisions (column 6, lines 44-64; column 46, line 46, through column 47, line 8; decision parameters are those changes a manager has chosen to possibly make and for which a future simulation is being performed);

- wherein each scenario depicts a situation in the decision domain for which one or more candidate decisions potentially affecting the corresponding scenario parameters could be adopted, each of the one or more alternative scenarios represents a possible future into which the baseline scenario could evolve (column 46, line 46, through column 47, line 8; this is one of the

basic concepts of the simulation; scenario parameters are the input data that define a particular possible future for which financial performance is being predicted);

- each candidate decision represents an intervention for influencing the alternative scenario parameters defining the one or more alternative scenarios (column 6, lines 44-64; column 46, line 46, through column 47, line 8; scenario parameters are the input data that define a particular possible future for which financial performance is being predicted; for the reference's invention, the point of the simulations is to find out the effect of a possible management decision, so the scenario parameters represent the effects of a decision that could potentially be made by management);

- (means for) simulating, for one or more future time instants, each of the one or more alternative scenarios as influenced by each candidate decision represented by the candidate decision parameters and parameters characterizing assumptions in alternative scenarios (column 5, line 31, through column 6, line 25; column 6, lines 44-64; column 46, line 46, through column 47, line 8; decision parameters are those changes a manager has chosen to possibly make and for which a future simulation is being performed; the mathematical model of the simulations incorporates parameters characterizing assumptions in alternative scenarios);

- for each candidate decision represented by the candidate decision parameters, (means for) outputting simulation results based on the alternative scenario parameters corresponding to the simulated alternative scenarios at one or more future time instants (column 46, line 46, through column 47, line 8; scenario parameters are the input data that define a particular possible future for which financial performance is being predicted; results of the simulation can be

displayed to the user; decision parameters are those changes a manager has chosen to possibly make and for which a future simulation is being performed);

- a machine-readable medium, having encoded thereon program code, wherein, when the program code is executed by a machine, the machine implements a method for supporting decision-making (column 7, line 66, through column 8, line 25; column 9, line 41, through column 10, line 14).

As per **Claim 65**, Eder further discloses: wherein, for a user to construct a user-specified scenario, a predefined model for a decision domain defines one or more types of entities defining decision strategies in the decision domain (column 5, line 31, through column 6, line 25); one or more attributes for each entity type representing properties of the entity type (column 5, line 31, through column 6, line 25); one or more dynamic behaviors of decision strategies representing sources of change in the decision domain, the behavioral dynamics representing one or more ways entities change over time and interact with each other, the one or more dynamic behaviors being ascribed to one or more entity types that depict decision strategies (column 5, line 31, through column 6, line 25).

As per **Claim 66**, Eder further discloses: wherein the user-specified scenario parameters include entity parameters identifying a plurality of entities populating the scenario, wherein the entities are instances of the model's entity types (column 46, line 46, through column 47, line 8); attribute parameters characterizing one or more of the entities in the scenario (column 46, line

46, through column 47, line 8); relational parameters representing relationships between one or more entities in the scenario (column 46, line 46, through column 47, line 8).

As per **Claim 67**, Eder further discloses: wherein each of the one or more alternative scenarios corresponds to assumptions about one or more situational forces, trends, events, and entity behaviors that drive a plausible alternative evolution of the baseline scenario over one or more future time instants (column 46, line 46, through column 47, line 8).

As per **Claim 68**, Eder further discloses: wherein the attribute parameters include performance metrics indicating one or more strengths and weaknesses of the one or more candidate decisions at one or more future time instants (column 46, line 46, through column 47, line 8).

As per **Claim 73**, Eder further discloses: wherein the simulation is based on situational dynamics including formulas characterizing changes in one or more alternative scenario parameters caused by one or more behaviors of one or more entities (column 5, line 31, through column 6, line 25; column 46, line 46, through column 47, line 8).

As per **Claim 74**, Eder further discloses: wherein the situational dynamics are specified as both pre-defined elements in the decision domain model and via user-specified attribute parameters (column 5, line 31, through column 6, line 25).

As per **Claim 75**, Eder further discloses: storing persistently, for each candidate decision represented by the candidate decision parameters, scenario parameters corresponding to baseline and alternative scenarios received in step (b) (column 8, line 26, through column 9, line 2).

As per **Claim 76**, Eder further discloses: storing persistently, for outputs produced by simulations of alternative scenarios and candidate decisions over one or more future time instants, all changes in scenario entities and attribute parameters of the scenario entities simulated in step (c) (column 8, line 26, through column 9, line 2; column 46, line 46, through column 47, line 8).

As per **Claim 77**, Eder further discloses: wherein step (d) comprises graphically displaying one or more summaries of changes in alternative scenario parameters corresponding to the simulated alternative scenarios over one or more future time instants for purposes of analyzing projected outcomes of simulated candidate decisions (column 46, line 46, through column 47, line 8).

As per **Claim 78**, Eder further discloses: wherein the summaries are produced in tabular report formats based on user-specified queries (Figure 14; column 46, line 46, through column 47, line 8).

As per **Claim 79**, Eder further discloses: wherein the summaries enable comparative analysis of one or more differences, strengths and weaknesses of candidate decisions in

achieving desired results across alternative scenarios (Figure 14; column 46, line 46, through column 47, line 8).

As per **Claim 80**, Eder further discloses: permitting user entry of one or more scenario parameters and candidate decision parameters (column 6, lines 44-64; column 7, line 66, through column 8, line 25; column 46, line 46, through column 47, line 8).

As per **Claim 81**, Eder further discloses: permitting user entry of one or more scenario parameters and candidate decision parameters by means of one or more graphically-displayed controls (column 7, line 66, through column 8, line 25).

As per **Claim 89**, Eder further discloses: applying a statistical-simulation technique (column 46, lines 32-45).

As per **Claim 90**, Eder further discloses: wherein the statistical-simulation technique is a Monte Carlo simulation (column 46, lines 32-45).

As per **Claim 99**, Eder further discloses: permitting a user to interactively specify the one or more analyses to perform (column 46, line 46, through column 47, line 8).

As per **Claim 100**, Eder further discloses: wherein the analyses include one or more tabular reports summarizing changes in entity attribute parameter values over one or more future time instants (Figure 14; column 46, line 46, through column 47, line 8).

As per **Claim 101**, Eder further discloses: wherein the analyses permit comparison of entity attribute parameter values over one or more future time instants across simulation runs of different candidate decisions under alternative scenarios (Figure 14; column 6, lines 44-64; column 46, lines 20-31; column 46, line 46, through column 47, line 8).

As per **Claim 102**, Eder further discloses: wherein at least one intervention is a strategy for influencing a scenario in a desired manner (column 6, lines 44-64; column 46, line 46, through column 47, line 8).

As per **Claim 103**, Eder further discloses: wherein at least one intervention is a strategy not to influence the alternative scenario parameters (column 46, line 46, through column 47, line 8).

As per **Claims 106 and 113-114**, Eder discloses:

- a computer-implemented method of (or a computer system for) constructing a decision-support application for a decision domain (column 6, lines 44-64; column 46, line 46, through column 47, line 8);

- (means for) constructing a model of a decision domain for creating a plurality of scenarios in the decision domain, the decision model comprising a plurality of decision model entity classes (column 6, lines 44-64; column 46, line 46, through column 47, line 8; decision-model entity classes here are items that define a given future simulation);

- (means for) creating specifications for linking the plurality of decision-model entity classes to a decision-support simulator framework (column 5, line 31, through column 6, line 25; the mathematical model here makes that linkage);

- (means for) populating an application database for the decision domain based on the plurality of decision-model entity classes (column 5, lines 16-30; the system draws in the data it will need);

- (means for) compiling the application database and the specifications to generate a decision-support application that is executable under the decision-support simulator framework (column 5, lines 16-30; column 5, line 31, through column 6, line 25; column 6, lines 44-64; column 9, line 41, through column 10, line 15; column 46, line 46, through column 47, line 8);

- a machine-readable medium, having encoded thereon program code, wherein, when the program code is executed by a machine, the machine implements a method for constructing a decision-support application for a decision domain (column 6, lines 44-64; column 7, line 66, through column 8, line 25; column 46, line 46, through column 47, line 8; column 9, line 41, through column 10, line 14).

As per **Claim 107**, Eder further discloses: wherein the plurality of decision-model entity classes comprising a scenario class have a plurality of associated classes, each entity class further

defined by one or more entity attributes characterizing one or more of the entities in the scenario class, one or more relationship attributes representing relationships between one or more entities in the scenario class, and one or more class interfaces defining methods representing entity behaviors and dynamic interactions (column 5, line 31, through column 6, line 25; column 46, line 46, through column 47, line 8).

As per **Claim 108**, Eder further discloses: wherein the decision-model entity classes are types defined by one or more object-oriented programming languages (column 9, line 41, through column 10, line 15).

As per **Claim 109**, Eder further discloses: wherein the one or more object-oriented programming languages include C++ (column 9, line 41, through column 10, line 15).

As per **Claim 110**, Eder further discloses: providing a software development environment for a user to create the application-specific decision model (column 46, line 46, through column 47, line 8).

As per **Claim 112**, Eder further discloses: creating one or more application-specific reports for organizing simulation output, wherein the compiling step comprises compiling the one or more application-specific reports (Figure 14; column 46, line 46, through column 47, line 8).

As per **Claims 115 and 120-121**, Eder discloses:

- a computer-implemented method of (or a computer system for) supporting decision-making (column 6, lines 44-64);

- (means for) generating, based on user input, a plurality of alternative scenarios representing possible evolutions of a baseline scenario (column 46, lines 20-31; column 46, lines 32-45; column 46, line 46, through column 47, line 8; the baseline scenario is the business's current state);

- (means for) generating, based on user input, a plurality of strategies for influencing the alternative scenarios (column 46, lines 20-31; column 46, lines 32-45; column 46, line 46, through column 47, line 8; the strategies must have been generated to be tested);

- (means for) simulating outcomes of each of the strategies for each of the alternative scenarios over time (to permit comparison of the simulated outcomes) (column 46, lines 20-31; column 46, lines 32-45; column 46, line 46, through column 47, line 8);

- (means for) providing output data, based on the simulated outcomes, to permit comparison of the simulated outcomes for each of the strategies (column 6, lines 44-64; column 46, lines 20-31; column 46, lines 32-45; column 46, line 46, through column 47, line 8; reports can be compared for various simulations);

- a machine-readable medium, having encoded thereon program code, wherein, when the program code is executed by a machine, the machine implements a method of supporting decision-making (column 7, line 66, through column 8, line 25; column 9, line 41, through column 10, line 14).

As per **Claim 116**, Eder further discloses: wherein the outcomes include one or more performance metrics to permit selection of an optimal strategy, and wherein the outputting step further comprises outputting one or more performance metrics (column 46, line 46, through column 47, line 8).

As per **Claim 119**, Eder further discloses: wherein the decision domain is competitive strategy (column 6, lines 44-64; column 46, line 46, through column 47, line 8).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9-3. Claims 69-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eder in view of Honarvar et al., U.S. Patent No. 6,405,173 B1.

As per **Claim 69**, Eder further discloses: wherein the attribute parameters include numeric characteristics of scenario entities (column 46, line 46, through column 47, line 8). Eder fails to disclose wherein characteristics of scenario entities are qualitative. Honarvar et al. discloses wherein characteristics of scenario entities are qualitative (column 6, lines 27-46; column 8, lines 48-49; column 1, lines 46-51; "the present invention relates to a decision management system providing simulation for qualitative client assessment"). It would have been

obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder such that characteristics of scenario entities are qualitative, as disclosed by Honarvar et al. Motivation is provided in that it was well-known to a person of ordinary skill in the art at the time of applicant's invention that numbers alone cannot always fully describe a situation.

As per **Claim 70**, Eder further discloses: wherein the attribute parameters are permitted to assume values of real numbers (column 46, line 46, through column 47, line 8).

9-4. Claims 71-72 and 111 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eder in view of Kramer et al., U.S. Patent No. 6,327,574 B1.

As per **Claim 71**, Eder fails to disclose wherein attribute parameters have descriptive metadata for annotations. Kramer et al. discloses wherein attribute parameters have descriptive metadata for annotations (column 5, lines 46-61; information being user-specified was addressed in the rejection for claim 64). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder such that attribute parameters have descriptive metadata for annotations, as disclosed by Kramer et al. Kramer et al. provides motivation in that metadata is useful for telling a system how to use related data (column 5, lines 46-61).

As per **Claim 72**, Eder fails to disclose wherein the metadata includes references to the data sources of the values. Kramer et al. further discloses wherein the metadata includes

references to the data sources of the values (column 12, lines 35-43; information being user-specified was addressed in the rejection for claim 64). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder as modified in the rejection for claim 71 such that the metadata includes references to the data sources of the values, as disclosed by Kramer et al. Kramer et al. implicitly provides motivation in that the metadata including reference to the data sources of the values allows for that information to be communicated (column 12, lines 35-43).

As per Claim 111, Eder further discloses: using an automated code generator to generate code embodying the relational schema from entity type specifications, and editing and executing the code to generate relational schema for the application-specific model (column 5, lines 16-30; column 9, line 41, through column 10, line 15; column 46, line 46, through column 47, line 8). Eder fails to disclose incorporating metadata in the invention. Kramer et al. discloses incorporating metadata in the invention (column 5, lines 46-61). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder such that it incorporates metadata in the invention, as disclosed by Kramer et al. Kramer et al. provides motivation in that metadata is useful for telling a system how to use related data (column 5, lines 46-61).

9-5. Claim 82 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eder in view of Huang et al., U.S. Patent No. 5,953,707. Eder further discloses: storing baseline scenario parameters (column 5, lines 16-30; column 6, lines 44-64); permitting user entry of alternative scenario parameters (column 6, lines 44-64). Eder fails to disclose copying baseline or

alternative scenarios and altering one or more of the copied scenario parameters. Huang et al. discloses copying baseline or alternative scenarios and altering one or more of the copied scenario parameters (column 104, line 63, through column 105, line 14; column 107, line 59, through column 108, line 4). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder such that it allows the user to copy baseline or alternative scenarios and alter one or more of the copied scenario parameters, as disclosed by Huang et al. Huang et al. provides motivation in that such copying and altering allows the user to create new scenarios (column 107, line 59, through column 108, line 4).

9-6. Claims 83-85, 87, and 117 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eder.

As per Claim 83, Eder further discloses permitting automated import of information from one or more external sources (column 5, line 31, through column 6, line 25; column 7, line 66, through column 8, line 25; information being scenario parameters and candidate decision parameters was addressed in the rejection for claim 64; Eder does not discuss the automated import of scenario parameters and candidate decision parameters). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder such that it permits automated import of one or more scenario parameters and candidate decision parameters from one or more external sources; in doing so, it would be permitting automated import of information from one or more external sources, as disclosed by Eder. Eder provides motivation in that automated import of information eliminates time-consuming and expensive effort (column 5, lines 16-30).

As per **Claim 84**, Eder further discloses: wherein the one or more external sources includes an interface to a database (column 7, line 66, through column 8, line 25).

As per **Claim 85**, Eder further discloses: wherein the one or more external sources includes one or more files in a common data exchange format (column 7, line 66, through column 8, line 25).

As per **Claim 87**, Eder further discloses: scenario parameters and candidate decision parameters (column 5, line 31, through column 6, line 25; column 6, lines 44-64; column 46, line 46, through column 47, line 8); a library of previously stored scenario entities (column 46, lines 32-45; column 46, line 46, through column 47, line 8). Eder further discloses permitting automated import of information (column 7, line 66, through column 8, line 25; Eder does not discuss the automated import of scenario parameters and candidate decision parameters). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder such that it permits automated import of one or more scenario parameters and candidate decision parameters from a library of previously stored scenario entities; in doing so, it would be permitting automated import of information, as disclosed by Eder. Eder provides motivation in that automated import of information eliminates time-consuming and expensive effort (column 5, lines 16-30).

As per **Claim 117**, Eder fails to disclose wherein an optimal strategy is a strategy that displays superior values of performance metrics across the plurality of alternative scenarios. However, that element/limitation was well-known in the art at the time of applicant's invention (the optimal strategy is general regarded to be the strategy that is predicted to be the most successful). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder such that an optimal strategy is a strategy that displays superior values of performance metrics across the plurality of alternative scenarios, as was well-known in the art at the time of applicant's invention. Motivation is provided in that it was well-known to a person of ordinary skill in the art at the time of applicant's invention that this is generally believed to be an accurate method of determining optimal strategy.

9-7. Claim 86 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eder in view of Kim et al., U.S. Patent Application Publication No. US 2002/0065701 A1. Eder fails to disclose wherein the common data exchange format is an extensible markup language (XML) document format. Kim et al. discloses wherein the common data exchange format is an extensible markup language (XML) document format (paragraph [0182]). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder as modified in the rejection for claim 85 such that the common data exchange format is an extensible markup language (XML) document format, as disclosed by Kim et al. Kim et al. provides motivation in that XML allows information to be exchanged among various systems (paragraph [0182]).

9-8. Claims 88 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eder in view of Steinman, U.S. Patent No. 5,850,538.

As per **Claim 88**, Eder fails to disclose applying a parallel discrete-event simulation technique. Steinman discloses applying a parallel discrete-event simulation technique (column 1, lines 19-40). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder such that it applies a parallel discrete-event simulation technique, as disclosed by Steinman. Steinman provides motivation in that it mentions a parallel discrete-event simulation technique as one type of simulation technique that could be chosen to perform a simulation (column 1, lines 19-40).

As per **Claim 93**, Eder fails to disclose applying an event-based simulation technique. Steinman discloses applying an event-based simulation technique (column 1, lines 19-40). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder such that it applies an event-based simulation technique, as disclosed by Steinman. Steinman provides motivation in that it mentions an event-based simulation technique as one type of simulation technique that could be chosen to perform a simulation (column 1, lines 19-40).

9-9. Claims 91 and 95-96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eder in view of Bonabeau, U.S. Patent Application Publication No. US 2001/0053991 A1.

As per **Claim 91**, Eder fails to disclose applying a system dynamics simulation technique. Bonabeau discloses applying a system dynamics simulation technique (paragraphs [0057]-[0058]). It would have been obvious to one of ordinary skill in the art at the time of

applicant's invention to modify the invention of Eder such that it applies a system dynamics simulation technique, as disclosed by Bonabeau. Bonabeau provides motivation in that it describes system dynamics simulation as an appropriate choice for a business simulation (paragraphs [0057]-[0058]).

As per **Claim 95**, Eder fails to disclose applying a combination of two or more simulation techniques in projecting scenario dynamics. Bonabeau discloses applying a combination of two or more simulation techniques in projecting scenario dynamics (paragraphs [0057]-[0058]). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder such that it applies a combination of two or more simulation techniques in projecting scenario dynamics, as disclosed by Bonabeau. Bonabeau provides motivation in that it describes using a combination of simulations as an appropriate choice for a business simulation (paragraphs [0057]-[0058]).

As per **Claim 96**, Eder fails to disclose wherein a simulation step is performed by a framework containing a set of simulation techniques and adapted to receive and use one or more new simulation techniques performed based on simulation technique parameters specified by a user. Bonabeau discloses wherein a simulation step is performed by a framework containing a set of simulation techniques and adapted to receive and use one or more new simulation techniques performed based on simulation technique parameters specified by a user (paragraphs [0057]-[0058]). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder such that a simulation step is performed by

a framework containing a set of simulation techniques and adapted to receive and use one or more new simulation techniques performed based on simulation technique parameters specified by a user, as disclosed by Bonabeau. Bonabeau provides motivation in that it describes using a combination of simulations as an appropriate choice for a business simulation (paragraphs [0057]-[0058]).

9-10. Claim 92 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eder in view of Eicher, Jr. et al., U.S. Patent Application Publication No. US 2002/0099598 A1. Eder fails to disclose applying a complex adaptive system technique. Eicher, Jr. et al. discloses applying a complex adaptive system technique (paragraph [0137]). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder such that it applies a complex adaptive system technique, as disclosed by Eicher, Jr. et al. Eicher, Jr. et al. provides motivation in that it describes complex adaptive system technique as an appropriate choice for a predictive analysis (paragraph [0137]).

9-11. Claim 94 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eder in view of Ball et al., U.S. Patent No. 6,212,502 B1. Eder fails to disclose using a Bayesian inference technique to compound conditional probabilities. Ball et al. discloses using a Bayesian inference technique to compound conditional probabilities (column 2, line 16, through column 4, line 4; column 12, lines 5-21). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder such that it uses a Bayesian inference technique to compound conditional probabilities, as disclosed by Ball et al. Ball et al. provides motivation in that it discusses the use of Bayesian techniques in decision-support systems (column 2, line 16, through column 4, line 4; column 12, lines 5-21).

9-12. Claim 97 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eder in view of Watanabe et al., U.S. Patent No. 5,761,486. Eder fails to disclose permitting a user to monitor the progress of the simulation in real time. Watanabe et al. discloses permitting a user to monitor the progress of the simulation in real time (column 3, lines 10-55). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder such that it permits a user to monitor the progress of the simulation in real time, as disclosed by Watanabe et al. Motivation is provided in that it was well-known to a person of ordinary skill in the art at the time of applicant's invention that a real-time function has the benefit of no time delays.

9-13. Claim 98 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eder in view of Clarisse, U.S. Patent No. 5,247,651, in further view of Watanabe et al. Eder fails to disclose permitting a user to pause simulations, interactively change scenario, and resume simulations. Clarisse discloses permitting a user to pause simulations, interactively change scenario, and resume simulations (column 4, lines 51-60; scenario and decision parameters were addressed in claim 64). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder such that it permits a user to pause simulations, interactively change scenario, and resume simulations, as disclosed by Clarisse. Clarisse provides motivation in that such a function allows the user to be able to alter a scenario and immediately view the results of that alteration (column 4, lines 51-60).

Eder and Clarisse fail to disclose inspecting simulation information during the simulation. Watanabe et al. discloses inspecting simulation information during the simulation (column 3, lines 10-55). It would have been obvious to one of ordinary skill in the art at the time of

applicant's invention to modify the invention of Eder as modified above in this rejection such that it permits the user to inspect simulation information during the simulation, as disclosed by Watanabe et al. Motivation is provided in that it was well-known to a person of ordinary skill in the art at the time of applicant's invention that a real-time function has the benefit of no time delays.

9-14. Claim 118 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eder in view of Abu El Ata, U.S. Patent No. 6,990,437 B1. Eder fails to disclose changing and refining the plurality of strategies based on comparisons of the strategies and the projected outcomes of the strategies. Abu El Ata discloses changing and refining the plurality of strategies based on comparisons of the strategies and the projected outcomes of the strategies (column 3, lines 25-44). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder such that it changes and refines the plurality of strategies based on comparisons of the strategies and the projected outcomes of the strategies, as disclosed by Abu El Ata. Abu El Ata provides motivation in that that step is one step of an optimization process (column 3, lines 25-44).

Eder fails to disclose updating the alternative scenarios based on the simulated results of the selected optimal strategy. Abu El Ata further discloses updating the alternative scenarios based on the simulated results of the selected optimal strategy (column 3, lines 25-44). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder as modified above in this rejection such that it updates the alternative scenarios based on the simulated results of the selected optimal strategy, as disclosed by Abu El

Ata. Abu El Ata provides motivation in that that step is one step of an optimization process (column 3, lines 25-44).

Eder fails to disclose simulating results of each of an updated plurality of strategies based on the updated alternative scenarios. Abu El Ata further discloses simulating results of each of an updated plurality of strategies based on the updated alternative scenarios (column 3, lines 25-44). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Eder as modified above in this rejection such that it simulates results of each of an updated plurality of strategies based on the updated alternative scenarios, as disclosed by Abu El Ata. Abu El Ata provides motivation in that that step is one step of an optimization process (column 3, lines 25-44).

(10) Response to Argument

10-1. (addressing section 7(A)(1) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 64, applicant first argues that Eder does not disclose selecting a predefined model of a decision domain from among a plurality of predefined models of decision domains. Rather, applicant argues that Eder only features a single decision domain from which to choose, as opposed to a choice of several decision domains disclosed in applicant's application. However, the language of claim 64 does not specify that the plurality of decision domains from which the used decision domain is chosen are actually defined within the computer program of the method. Therefore, the decision domain chosen could merely be a single decision domain offered by the program, which was chosen from a plurality of possible alternative decision domains known but not included as choices within the program. Therefore, Eder does disclose selecting a predefined model of a decision domain from among a plurality of

predefined models of decision domains. Thus, applicant's argument with respect to this point is not persuasive.

Additionally, applicant argues that Eder only discloses addressing a single scenario, as opposed to multiple scenarios addressed in the applicant's application. However, Eder does indeed address the analysis of multiple scenarios. For example, the model of business evaluation presented by Eder in Table 1 considers the value of excess cash and marketable securities as one component of the value of the enterprise. In a future projection, a decision might be made to sell off some marketable securities for cash. In different scenarios, different economic projections might result in a different input value for cash realized from the future selling of marketable securities. While Eder does not necessarily disclose analyzing several scenarios simultaneously, it does specify a program which can be run multiple times, with a different scenario defined each time. Therefore, Eder does disclose addressing multiple scenarios. Thus, applicant's argument with respect to this point is not persuasive.

Applicant argues for the novelty of claims 65-68, 73-81, 89-90, and 99-105 based on its argument for the novelty of claim 64. Since Examiner did not find applicant's arguments regarding claim 64 to be persuasive, Examiner is likewise not persuaded that these claims are novel.

10-2. (addressing section 7(A)(2) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 106, applicant first argues that Eder fails to disclose the creation of a plurality of scenarios in a decision domain. As discussed above, while Eder does not necessarily disclose analyzing several scenarios simultaneously, it does specify a program which can be run

multiple times, with a different scenario defined each time. Therefore, applicant's argument with respect to this point is not persuasive.

In addition, applicant argues that Eder fails to disclose compiling an application database and specifications to generate an executable decision-support application. However, this is disclosed by Eder in that this step would have to be performed to arrive at the program in Eder which is capable of the functions of that program disclosed by Eder. More specifically, applicant argues that Eder does not disclose applicant's invention with respect to claim 106 because applicant's invention is customizable, whereas creating Eder's application would be limiting the application to the program specified in Eder. While Eder does not disclose creating other applications different from its own program, the language of the claim does not preclude the creation of an application like that of Eder. Therefore, while perhaps other applications could be created under the method of claim 106, the language of claim 106 still embraces the disclosure of Eder, and Eder anticipates claim 106. Thus, applicant's argument with respect to this point is not persuasive.

Applicant argues for the novelty of claims 107-110 and 112-114 based on its argument for the novelty of claim 106. Since Examiner did not find applicant's arguments regarding claim 106 to be persuasive, Examiner is likewise not persuaded that these claims are novel.

10-3. (addressing section 7(A)(3) of Appeal Brief) Applicant argues that claim 115 is novel on the basis that Eder does not disclose multiple scenarios. Examiner disagrees with applicant and addressed this issue above in section 10-1. Therefore, applicant's argument is not persuasive with respect to this issue.

Applicant argues for the novelty of claims 116 and 119-121 based on its argument for the novelty of claim 115. Since Examiner did not find applicant's arguments regarding claim 115 to be persuasive, Examiner is likewise not persuaded that these claims are novel.

10-4. (addressing section 7(A)(4) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 65, applicant argues that Eder does not disclose one or more dynamic behaviors of people, places, things, events, and decision strategies representing sources of change in the decision domain, the dynamic behaviors representing one or more ways entities (i) change over time and (ii) interact with each other, the one or more dynamic behaviors being ascribed to one or more entity types that depict people, places, things, and decision strategies.

This is not the case. In the language of claim 65, some of the types of "enterprise elements" of Table 1 can be "entity types," as their values can define a particular decision strategy. For example, one of the decisions to be tested in the invention of Eder might be the effect on a business's value of reducing the amount of inventory by fifty percent. That particular decision would be a decision strategy. The dynamic behavior of that decision strategy would be the effect of that decision on various "enterprise elements" (entities) in the valuation model of Eder. The changes in the values of the "enterprise elements" would reflect both changes over time (the invention can be used to forecast the future) and interactions with each other (note how some "enterprise elements" in Table 1 are valued based on other values in the table). The dynamic behaviors are "ascribed" to the entity types (types of "enterprise elements") because the dynamic behaviors address how the values of the "enterprise elements" will change based on the inputs to the enterprise valuation model. Note that since, in the language of claim 65, an entity type need only define at least a single one of people, places, things, events, and decision strategies, and

only at least one entity type need be present, it is not necessary that entity types depict each one of people, places, things, and decision strategies. If the "enterprise elements" of Eder only depict a decision strategy, they are still sufficient to allow Eder to anticipate claim 65. Therefore, applicant's argument with respect to this point is not persuasive.

Applicant argues for the novelty of claim 107 based on its argument for the novelty of claim 65. Since Examiner did not find applicant's arguments regarding claim 65 to be persuasive, Examiner is likewise not persuaded that claim 107 is novel.

10-5. (addressing section 7(A)(5) of Appeal Brief) Applicant argues that claim 67 is novel on the basis that Eder does not disclose multiple scenarios. Examiner disagrees with applicant and addressed this issue above in section 10-1. Therefore, applicant's argument is not persuasive with respect to this claim.

10-6. (addressing section 7(A)(6) of Appeal Brief) Applicant argues that claim 73 is novel on the basis that Eder does not disclose multiple scenarios. Examiner disagrees with applicant and addressed this issue above in section 10-1. Therefore, applicant's argument is not persuasive with respect to this claim.

Applicant argues for the novelty of claim 74 based on its argument for the novelty of claim 73. Since Examiner did not find applicant's arguments regarding claim 73 to be persuasive, Examiner is likewise not persuaded that claim 74 is novel.

10-7. (addressing section 7(A)(7) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 74, applicant argues that Eder fails to disclose user-specified attribute parameters. Examiner disagrees. In the enterprise valuation method of Table 1, there are input values such as "excess cash & marketable securities" which are clearly user-specific and would

need to be specified by the user. Note the asterisk at the end of Table 1, which indicates that "The user also has the option of specifying the total value." Applicant argues that claim 74 recites user-specified attribute parameters, not user-specified values for predefined attribute parameters. Examiner responds that the words "user-specified attribute parameters" could reasonably be interpreted as either attribute parameters for which the values are user-specified or attribute parameters for which the quantities measured by the attribute parameters are user-specified. Therefore, applicant's argument with respect to this point is not persuasive.

10-8. (addressing section 7(A)(8) of Appeal Brief) Applicant argues that claim 75 is novel on the basis that Eder does not disclose multiple scenarios or a predefined model from among a plurality of predefined models of decision domains. Examiner disagrees with applicant and addressed these issues above in section 10-1. Therefore, applicant's argument is not persuasive with respect to this claim.

10-9. (addressing section 7(A)(9) of Appeal Brief) Applicant argues that claim 76 is novel on the basis that Eder does not disclose multiple scenarios or a predefined model from among a plurality of predefined models of decision domains. Examiner disagrees with applicant and addressed these issues above in section 10-1. Therefore, applicant's argument is not persuasive with respect to this claim.

10-10. (addressing section 7(A)(10) of Appeal Brief) Applicant argues that claim 77 is novel on the basis that Eder does not disclose multiple scenarios or a predefined model from among a plurality of predefined models of decision domains. Examiner disagrees with applicant and addressed these issues above in section 10-1. Therefore, applicant's argument is not persuasive with respect to this claim.

Applicant argues for the novelty of claims 78-79 based on its argument for the novelty of claim 77. Since Examiner did not find applicant's arguments regarding claim 77 to be persuasive, Examiner is likewise not persuaded that claims 78-79 are novel.

10-11. (addressing section 7(A)(11) of Appeal Brief) Applicant argues that claim 79 is novel on the basis that Eder does not disclose multiple scenarios. Examiner disagrees with applicant and addressed this issue above in section 10-1. Therefore, applicant's argument is not persuasive with respect to this claim.

10-12. (addressing section 7(A)(12) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 100, applicant argues that Eder fails to disclose graphic time series and histogram charts of scenario attributes. Applicant argues that this limitation is required because the claim is written in the conjunctive: wherein the analyses include one or more (i) graphic time series and histogram charts of scenario attributes and (ii) tabular reports summarizing changes in entity attribute parameter values over one or more future time instants. However, this cannot be the correct interpretation because the claim clearly states that the analyses include ONE OR MORE (emphasis added) of (i) and (ii). If (i) and (ii) were both required, at least two of them would be required and the wording would be "two or more" in place of "one or more." Therefore, applicant's argument with respect to this point is not persuasive.

Applicant also argues that claim 100 is novel on the basis that Eder does not disclose a predefined model from among a plurality of predefined models of decision domains. Examiner disagrees with applicant and addressed these issues above in section 10-1. Therefore, applicant's argument is not persuasive with respect to this claim.

10-13. (addressing section 7(A)(13) of Appeal Brief) Applicant argues that claim 101 is novel on the basis that Eder does not disclose multiple scenarios. Examiner disagrees with applicant and addressed this issue above in section 10-1. Therefore, applicant's argument is not persuasive with respect to this claim.

10-14. (addressing section 7(A)(14) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 102, applicant argues that Eder fails to disclose wherein at least one intervention is a strategy, plan, investment, or other proposed course of action for influencing a scenario in a desired manner. Examiner asserts that Eder discloses wherein at least one intervention is a strategy for influencing a scenario in a desired manner. Referring to column 46, line 46, through column 47, line 8, for example, the reference discusses the user using the invention of Eder to simulate the effect of particular changes in value drivers. This can be a strategy that is being tested. This can be a user-initiated strategy as opposed to only an inadvertent environmentally-influenced change being simulated, for example, because Eder also addresses the case where the invention is run in goal-seeking mode where the user specifies a particular goal for future financial performance and the system returns a recommendation regarding changes to be made to obtain that goal. If the changes being discussed were merely non-user-initiated environmentally-influenced changes, then recommendations would not be made with respect to changes, as making a recommendation to a user regarding changes to be made implies that at least some of the changes being analyzed can be deliberately initiated by people, that is, they are strategies. Therefore, applicant's argument with respect to this point is not persuasive.

10-15. (addressing section 7(A)(15) of Appeal Brief) Applicant argues that claim 103 is novel on the basis that Eder does not disclose multiple scenarios. Examiner disagrees with applicant and addressed this issue above in section 10-1. Therefore, applicant's argument is not persuasive with respect to this claim.

10-16. (addressing section 7(A)(16) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 110, applicant argues that Eder does not disclose a software development environment for a user to create the decision model, wherein the decision model is application-specific. Examiner disagrees. Eder discloses a decision model that is application-specific, that is, it is a decision model specifically designed for the application. Since such a piece of software is disclosed in Eder, a software development environment must have existed to create that software, so that is disclosed by Eder as well. Therefore, applicant's argument with respect to this point is not persuasive.

10-17. (addressing section 7(A)(17) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 116, applicant argues that Eder fails to disclose wherein the outcomes include one or more performance metrics to permit selection of an optimal strategy. Referring to column 46, line 46, through column 47, line 8, for example, the reference discusses the user using the invention of Eder to simulate the effect of particular changes in value drivers. This can be a strategy that is being tested. This can be a user-initiated strategy as opposed to only an inadvertent environmentally-influenced change being simulated, for example, because Eder also addresses the case where the invention is run in goal-seeking mode where the user specifies a particular goal for future financial performance and the system returns a recommendation regarding changes to be made to obtain that goal. If the changes being

discussed were merely non-user-initiated environmentally-influenced changes, then recommendations would not be made with respect to changes, as making a recommendation to a user regarding changes to be made implies that at least some of the changes being analyzed can be deliberately initiated by people, that is, they are strategies. As the use of a goal-seeking mode is disclosed for determining particular changes in value drivers to be made to bring about a goal outcome of financial performance, it is also clear that an object of simulating effects of changes in value drivers in the invention of Eder is to determine optimal strategies. The invention of Eder is based on a model of enterprise valuation (see column 5, line 31, through column 6, line 24), so enterprise value would clearly qualify as a performance metric in this case. Therefore, applicant's argument with respect to this point is not persuasive.

10-18. (addressing section 7(A)(18) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 119, applicant argues that Eder does not address the concept of competitive strategy. However, applicant also admits that a key challenge facing managers in developing competitive strategy is understanding advantages in a changing competitive environment. Eder allows a manager to test various strategies to find strategies which maximize the value of the enterprise. Since a more highly valued enterprise reflects a greater advantage over competitors, Eder does indeed address making decisions with respect to competitive strategy. Therefore, applicant's argument with respect to this point is not persuasive.

10-19. (addressing section 7(B) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 70, applicant argues that Eder fails to disclose all of the required limitations of the claim because the claim is recited in the conjunctive, not the disjunctive. Examiner disagrees. The language of the claim recites wherein the attribute parameters are

permitted to assume values of any one or more of the following data types: integer or real numbers, symbols, lists, tables, vectors, relationships, interval ranges, free text, and Boolean descriptors. Note that, according to the claim, attribute parameters can assume only one of the data types, as opposed to always being permitted to assume all of the data types. Therefore, the language of the claim embraces the situation where the attribute parameters only assume the values of real numbers, for example. Thus, applicant's argument with respect to this point is not persuasive.

10-20. (addressing section 7(C)(1) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 71, applicant argues that Kramer et al. is non-analogous art. Examiner disagrees, as both Kramer et al. and applicant's invention are in the field of business methods. Therefore, applicant's argument with respect to this point is not persuasive.

Applicant argues for the allowability of claim 72 based on its argument for the allowability of claim 71. Since Examiner did not find applicant's arguments regarding claim 71 to be persuasive, Examiner is likewise not persuaded that claim 72 is allowable.

10-21. (addressing section 7(C)(2) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 72, applicant argues that Kramer et al. is non-analogous art. Examiner disagrees, as both Kramer et al. and applicant's invention are in the field of business methods. Therefore, applicant's argument with respect to this point is not persuasive.

10-22. (addressing section 7(C)(3) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 111, applicant argues that Eder does not disclose using an automated code generator or editing code to generate relational schema and metadata for a decision model. Examiner argues that the rejection is correct. The portions of Eder cited in the

rejection make it clear that Eder's invention is capable of automatic retrieval of information from database, as well as the storage of that information in its own database. Databases are typically encoded computer files which have relational schema. The creation and editing of the output database files of Eder would thus use an automated code generator or would edit code to generate relational schema. As addressed in the original rejection of claim 111, Eder does not address the metadata component of this claim, but that gap is filled by Kramer et al. at the cites disclosed in the original rejection for claim 111. Applicant argues against Kramer et al. with a conclusory statement that Kramer et al. does not teach the claim limitations but does not address specifically why the cites for Kramer et al. in the original rejection for claim 111 do not teach the claim limitations for which it is applied. Therefore, applicant's argument with respect to this point is not persuasive.

Regarding applicant's arguments with respect to the rejection of claim 111, applicant argues that Kramer et al. is non-analogous art. Examiner disagrees, as both Kramer et al. and applicant's invention are in the field of business methods. Therefore, applicant's argument with respect to this point is not persuasive.

10-23. (addressing section 7(D) of Appeal Brief) Applicant argues that claim 82 is non-obvious on the basis that Eder does not disclose multiple scenarios. Examiner disagrees with applicant and addressed this issue above in section 10-1. Therefore, applicant's argument is not persuasive with respect to this claim.

Regarding applicant's arguments with respect to the rejection of claim 82, applicant argues that Huang et al. is non-analogous art. Examiner disagrees, as both Huang et al. and

applicant's invention are in the field of business methods. Therefore, applicant's argument with respect to this point is not persuasive.

10-24. (addressing section 7(E) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 117, a "traverse" is a denial of an opposing party's allegations of fact. (Definition of Traverse, Black's Law Dictionary, "In common law pleading, a traverse signifies a denial.") The Examiner respectfully submits that applicant's arguments and comments do not appear to traverse what Examiner regards as knowledge that would have been generally available to one of ordinary skill in the art at the time the invention was made. Even if one were to interpret applicant's arguments and comments as constituting a traverse, applicant's arguments and comments do not appear to constitute an adequate traverse because applicant has not specifically pointed out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. 27 CFR 1.104(d)(2), MPEP 707.07(a). An adequate traverse must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying Examiner's notice of what is well known to one of ordinary skill in the art. *In re Boon*, 439 F.2d 724, 728, 169 USPQ 231, 234 (CCPA 1971).

If applicant does not seasonably traverse the well known statement during examination, then the object of the well known statement is taken to be admitted prior art. *In re Chevenard*, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). MPEP 2144.03 Reliance on Common Knowledge in the Art or "Well Known" Prior Art.

Even if applicant's challenge of official notice was proper with respect to the rejection of claim 117, Examiner responds as follows: applicant challenges Examiner's assertion that it was

well-known in the art at the time of applicant's invention that an optimal strategy is a strategy that displays superior values of performance metrics across the plurality of alternative scenarios. In response, Examiner presents Ouimet et al., U.S. Patent No. 6,308,162 B1. Ouimet et al. discloses optimization of strategy across multiple scenarios, wherein an optimal strategy is a strategy that displays superior values of performance metrics (column 1, line 12, through column 2, line 42; column 4, lines 42-55; gross profits to be maximized is an example of a performance metric in the reference). Therefore, Examiner's assertion that the limitation was well-known in the art at the time of applicant's invention was appropriate. Thus, applicant's argument with respect to this point is not persuasive.

10-25. (addressing section 7(F) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 86, applicant argues that Kim et al. is non-analogous art. Examiner disagrees, as both Kim et al. and applicant's invention are in the field of business methods. Therefore, applicant's argument with respect to this point is not persuasive.

10-26. (addressing section 7(G)(1) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 88, applicant argues that Steinman is non-analogous art. Examiner disagrees, as both Steinman and applicant's invention are in the field of simulations. Therefore, applicant's argument with respect to this point is not persuasive.

Applicant argues that claim 88 is non-obvious on the basis that Eder does not disclose multiple scenarios. Examiner disagrees with applicant and addressed this issue above in section 10-1. Therefore, applicant's argument is not persuasive with respect to this claim.

10-27. (addressing section 7(G)(2) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 93, applicant argues that Steinman is non-analogous art.

Examiner disagrees, as both Steinman and applicant's invention are in the field of simulations. Therefore, applicant's argument with respect to this point is not persuasive.

Applicant argues that claim 93 is non-obvious on the basis that Eder does not disclose multiple scenarios. Examiner disagrees with applicant and addressed this issue above in section 10-1. Therefore, applicant's argument is not persuasive with respect to this claim.

10-28. (addressing section 7(H) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 92, applicant argues that Eicher, Jr. et al. is non-analogous art.

Examiner disagrees, as both Eicher, Jr. et al. and applicant's invention are in the field of business methods. Therefore, applicant's argument with respect to this point is not persuasive.

Applicant argues that claim 92 is non-obvious on the basis that Eder does not disclose multiple scenarios. Examiner disagrees with applicant and addressed this issue above in section 10-1. Therefore, applicant's argument is not persuasive with respect to this claim.

10-29. (addressing section 7(I) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 94, applicant argues that Ball et al. is non-analogous art. Examiner disagrees, as both Ball et al. and applicant's invention are in the field of computer modeling.

Therefore, applicant's argument with respect to this point is not persuasive.

Applicant argues that claim 94 is non-obvious on the basis that Eder does not disclose multiple scenarios. Examiner disagrees with applicant and addressed this issue above in section 10-1. Therefore, applicant's argument is not persuasive with respect to this claim.

10-30. (addressing section 7(J) of Appeal Brief) Regarding applicant's arguments with respect to the rejection of claim 97, applicant argues that Watanabe et al. is non-analogous art. Examiner

disagrees, as both Watanabe et al. and applicant's invention are in the field of simulations.

Therefore, applicant's argument with respect to this point is not persuasive.

Applicant argues that claim 97 is non-obvious on the basis that Eder does not disclose multiple scenarios. Examiner disagrees with applicant and addressed this issue above in section 10-1. Therefore, applicant's argument is not persuasive with respect to this claim.

10-31. (addressing section 7(K) of Appeal Brief) Applicant argues that claim 118 is non-obvious on the basis that Eder does not disclose multiple scenarios. Examiner disagrees with applicant and addressed this issue above in section 10-1. Therefore, applicant's argument is not persuasive with respect to this claim.

Regarding applicant's arguments with respect to the rejection of claim 118, applicant argues that Abu El Ata fails to disclose updating the alternative scenarios based on the simulated outcome of the selected optimal strategy and simulating results of each of an updated plurality of strategies based on the updated alternative scenarios. Examiner disagrees. The original rejection for claim 118 cited column 3, lines 25-44, of Abu El Ata. That section discusses a method for designing an information system. Various design steps occur, resulting in alternative information system designs. The alternative information system designs are repeatedly compared to various scenarios in an iterative process which repeatedly refines the designs until an optimal design is arrived at. This method discloses updating the alternative scenarios based on the simulated outcome of the selected optimal strategy because when a scenario interacts with an updated information system design, an updated scenario has resulted for that iteration. This method discloses simulating results of each of an updated plurality of strategies based on the updated scenarios because the results are determined for each updated information system

design-scenario interaction for each iteration, through simulation. Applicant argues that Abu El Ata does not disclose the invention of claim 118 because the invention of claim 118 permits an entire decision or strategy to be revisited periodically using updated information generated by the simulated outcome of a prior optimal decision or strategy. However, Abu El Ata does disclose this because it discloses an iterative process which updates an information system design [the strategy, in that case] for each iteration based on the results of the previous iteration [which would include the results of the simulation for the information system design which performed best in the previous iteration]. Therefore, applicant's argument with respect to this point is not persuasive.

Regarding applicant's arguments with respect to the rejection of claim 118, applicant argues that Abu El Ata is non-analogous art. Examiner disagrees, as both Abu El Ata and applicant's invention are in the field of computer modeling. Therefore, applicant's argument with respect to this point is not persuasive.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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Examiner
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Conferees:

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